

HOW DO WE MEASURE OUR PROGRESS?

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WHY MEASURE PERFORMANCE?

Now that the mission, vision, goals and objectives are in place, a method for measuring the progress and success of implementation will be needed. Choosing a balanced set of results-based performance measures to gauge the success in meeting goals and objectives is one of the most important and difficult aspects of the strategic planning process.

Performance should be measured because:



Measuring performance is good management. Arizona's budget reform legislation requires that performance measures be established for agency, program and subprogram goals, thus providing accountability for results at each level of planning.



Measuring performance can enhance the quality of services. Performance measures inform program staff of customer needs and levels of satisfaction and make it possible to identify actions to improve quality and reduce costs.



What gets measured gets done. Most people want to do a good job. Performance measurement helps managers and employees focus on what is important. By comparing actual with expected results, it enables managers and policy makers to evaluate progress toward goals and objectives.



Measuring performance aids in budget development and review. Performance measures (formerly known as Service Measurements on Budget Schedule 4 Forms) are valuable in the budget development process. They allow a more accurate assessment of resources needed to support activities. They also help identify what level of product or service will be provided for the amount of funding available.



Measuring performance helps agencies answer the question "Why are public resources being spent on these activities?" Performance measures also bring greater clarity to the appropriations process and provide citizens with a more meaningful sense of the results that will be attained with their tax dollars.

CATEGORIES OF PERFORMANCE MEASURES

Performance measures: used to measure results and ensure accountability.

Arizona's strategic planning model incorporates five common performance measures: *input*, *output*, *outcome*, *efficiency* and *quality*. Each category is designed to answer a different question and must often be used in combination to analyze agency, program or subprogram results.

Inputs measure the amount of resources needed to provide particular products or services.

Inputs include labor, materials, equipment and supplies and can also represent demand factors, such as target populations. Input measures are useful in showing the total cost of providing a service, the mix of resources used to provide the service, the demand for services, and the amount of resources used for one service in relation to other services.

E X A M P L E S INPUT MEASURES

- Number of clients eligible for the program.
- Number of customers requesting service.
- Amount of paving material available.
- Number of child abuse reports received.
- Number of applications received.

Outputs measure the amount of products or services provided.

Outputs focus on the level of activity in a particular program or subprogram. Workload measures, which are designed to show how staff time will be allocated to respond to service demand, are most commonly reported. Outputs are useful in defining what a program produces. However, they are limited because they do not indicate whether the program goals have been accomplished, and they do not reveal anything about the quality or efficiency of the service provided.

E X A M P L E S OUTPUT MEASURES

- Miles of highway resurfaced.
- Number of police reports filed.
- Number of AFDC applications approved.
- Number of patients treated and released.
- Number of vaccinations given to school age children per year.
- Number of registered autos inspected.

Outcomes measure whether services are meeting proposed targets.

Outcomes reflect the actual results achieved, as well as the impact or benefit, of programs. Both intermediate and long-term outcomes can be evaluated. Policy makers are generally most interested in outcome measures. Yet information about the ultimate result is not always available or practical to measure. In these instances, it may be necessary to use proxy or surrogate measures. For example, completion of the 12th grade is not the same as literacy, but it may be the measurement that comes closest, and the one that can currently be measured.

E X A M P L E S	OUTCOME MEASURES
	• Percentage reduction in auto emissions.
	• Reduction in incidence of measles.
	• Percentage of discharged patients living independently (versus homeless).
	• Percent decrease in repeat complaints to a regulatory board.
	• Percent increase in new businesses attracted to the state.
	• Percent reduction in recidivism for juvenile offenders.

Output measures are often mistaken for outcome measures. Outcomes assess how effective or successful the program has been. Outputs alone cannot tell management how successful the program has been. How much work a program does is different from how well a program is working. The following illustrates the difference between outputs and outcomes.

Outputs		Outcomes
Number of patients discharged.	Is not the same as	Discharged patients living independently.
Number of vaccines given.	Is not the same as	Reduction of incidence of vaccine preventable disease.

Efficiency measures are also known as **productivity** measures.

Efficiency can be measured in terms of the cost per unit of output, the ratio of outputs per unit of input and the ratio of outputs per unit of time. Ratios help express the relationships between different performance measures to convey more information about the productivity and cost effectiveness of a program or subprogram.

E X A M P L E S	EFFICIENCY MEASURES
	Output/Input: Number of students graduating to number of students enrolled.
	Time/Output: Turnaround time per application processed.
	Cost/Input: Cost per inmate.
	Cost/Outcome: Cost per patient released and rehabilitated.

Quality measures reflect the effectiveness in meeting the expectations of customers and stakeholders.

Measures of quality include reliability, accuracy, courtesy, competence, responsiveness and completeness associated with the product or service provided. Lack of quality can also be measured: the resources that will be devoted to performing rework, correcting errors or resolving customer complaints. Both the positive and negative sides of measuring quality can be important to track.

E X A M P L E S	QUALITY MEASURES <ul style="list-style-type: none">• Number of defect-free reports compared to number of reports produced.• Number of course ratings in highest category related to total number of course ratings.• Percentage accuracy of information entered in the database.• Cost associated with errors in licenses requiring recall or cancellation.
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The next step in the planning process is to determine which set of measures will provide agencies, programs, customers and external policy makers with the information necessary to gauge progress.

Hint: The Litmus Test in the Forms section of this Handbook can be used to evaluate performance measures.

MEASURING PROGRESS

Choosing Performance Measures

One of the most difficult aspects of strategic planning is picking a balanced set of results-based performance measures to gauge the success in meeting goals and objectives. Once measures are decided on, agencies need to define the performance measures, determine data requirements, identify current baselines, set realistic performance targets based on benchmarking, and compare actual performance with expected results.

A comprehensive set of performance measures: will be linked to mission; will measure intermediate and final outcomes; will rely on measurability; will be valid and reliable; will delineate clear responsibilities; will address multiple priorities; and will be useful to staff, internal and external customers, stakeholders and policy makers.

Be careful that performance measures do not lead to wrong incentives. For example, if the focus is on the number of cases processed, employees might have the incentive to accept only the easiest cases in order to generate the highest ratings. A balance of measures can help overcome this potential shortcoming. Another approach is to separate measures for internal purposes, such as by type of client, customer or by geographic area to reflect workload difficulty.

1. Select Initial Performance Measures

Review the mission, vision, goals and objectives for the agency, programs and subprograms. Keep the intermediate and final outcomes in mind. Review “service” measurements from the budget, and performance measures from existing strategic plans and the *Master List of State Government Programs*.



Key Point

Inputs are generally easiest to collect; outcomes tend to be the most difficult. Recognize that it is difficult to get staff and management to focus on more than activities. Try to balance the collection process to include outcomes, efficiency and quality measures. Keep in mind that efficiency measures can be expressed as ratios of outputs and outcomes to inputs. Strive to define a balance of different types of measures for each goal. Because they are interrelated, measures cannot be considered in isolation. For example, increasing quality cannot be accomplished without regard to cost.

Hint: Use the Family of Measures worksheet in the Forms section of this Handbook.

Ideally, performance measures will be chosen with input from relevant staff at all levels of the agency, as well as input from customers and policy makers. The most effective measures are those which represent a consensus of what is intended and expected.

2. Evaluate the Performance Measures

The following criteria can be used to evaluate performance measures:

- **Meaningful**--significant and directly related to the mission and goal.
- **Valid**--represents what is being measured.
- **Responsibility linked**--matched to an organizational unit responsible for achieving the measure.
- **Customer focused**--reflect the point of view of the customers and stakeholders.
- **Comprehensive**--when taken together, the set includes all key aspects of program performance.
- **Balanced**--the set includes several types of measures i.e., outcome, efficiency and quality measures.
- **Credible**--based on accurate and reliable data.
- **Cost effective**--based upon acceptable data collection and processing costs.
- **Compatible**--integrated with existing financial and operational systems.
- **Comparable**--useful for making comparisons with other data over time.
- **Simple**--easy to calculate and interpret.
- **Useful**--accurately captures progress over time.

Hint: The Litmus Test in the Forms section of this Handbook can be used to evaluate performance measures.

3. Select the Key Performance Measures

Once the entire set of performance measures has been chosen, a subset of key measures needs to be selected. While internal management will need programs to collect enough measures to capture all aspects of performance, external policy makers will be interested in the success of the program.

Therefore, for external planning documents, focus on the desired results, the primary measure of achievement and a balance between external and internal focus. Review the complete list of measures for the agency and each program and subprogram and select those that are most important based upon the mission and goals. Identify the key or *vital few* measures to report on external planning documents. Recognize that outcome, efficiency and quality measures will be most useful to decision-makers. Also consider which measures could be aggregated to the next level of management for reporting purposes.

Hint: The Selection Criteria Matrix worksheet in the Forms section of this Handbook can be used to select key performance measures.

4. Determine Data Requirements

Once all measures have been chosen, the data needs of the agency, programs and subprograms will need to be determined.

To determine what data you need to collect, ask:

- What information is currently being gathered? Does it meet agency, program, subprogram needs?
- What new information needs to be collected?
- Do any data collection problems exist?
- Can needed data collection efforts be incorporated into existing efforts?
- What new (or modified) forms will be needed to collect data?
- What resources will be needed to manage performance data?
- What computer hardware and software exist to assist data collection and analysis?
- Are there any constraints to changing data collection? (For example, money, technology, tradition, politics, privacy, etc.)
- How often will the data be collected: monthly? quarterly? annually?

Performance data should be collected, verified and analyzed at the source of service because:

- Those closest to program service know the program best.
- Service deliverers can identify collection problems quickly.
- Service deliverers often have the best solutions to solving collection problems.
- It may be too costly to train someone else to collect the data.

Data analysis will be most useful to those monitoring performance when:

- The data is in a usable and meaningful format.
- Adequate time exists to collect, analyze and report the results.
- Training is instituted to help managers use performance data.
- Managers know what kinds of performance data to request for reports.

5. Define Performance Measures

Good performance measures need to be clearly defined, including exactly what is being measured, the source of the data and how the value is being calculated. Definitions that are clear and specific are not open to interpretation and this ensures that staff will be able to providing accurate and consistent information over time.

To assist agencies, OSPB has developed a logical system to dissect and record all pertinent information about performance measures. The *Performance Measure Summary Form*, which is included in the *Forms* section of this Handbook, can be completed for each performance measure at agency, program and subprogram levels.

Use of this form ensures that a detailed history of each performance measure can always be accessed by agency staff. Additionally, with the summary forms on file, questions regarding any aspect of the data can be answered quickly and consistently. The *Forms* section also includes a Litmus Test for Performance Measures, a Family of Measures worksheet and a Selection Criteria Matrix worksheet. Each worksheet is designed to aid in the difficult process of evaluating performance measures.

6. Determine Baseline Performance

The next step is to assess current performance (where are we now?). This information is then compared with future data to measure progress and improvement. The baseline is usually derived from the most recent one-year period. If no data is available, sometimes industry averages can be used. Otherwise, data will need to be collected to establish the initial baseline.



Key Points

Don't spend a lot of time determining the correct category for a particular performance measure. The definitions are not always precise and one particular measure could be described by more than one category.

Be patient while employees learn to collect new types of performance data.

Don't institute automation until you're sure the data you're collecting are the data you need.

Don't add unnecessary steps in data collection and analysis.

Examples of Performance Measures in Relation to Goals and Objectives

The following generic examples are designed to show the relationship of goals, objectives and performance measures. The examples include a balanced set of measures.

EXAMPLE FOR AN ADULT LITERACY COURSE.

Goal: To increase the literacy of adult students.

Objective: Increase the number of adult students able to read above 6th grade level to 25% in FY 1999.
Increase the number of adult students able to read above 6th grade level to 30% in FY 2000.
Increase the number of adult students able to read above 6th grade level to 35% in FY 2001.

Performance Measures:

Input:	Number of adults enrolled in the literacy course.
Output:	Number of adults completing the course.
Outcomes:	Number of students reading above the 6 th grade level upon completion of course. % reduction in rate of illiteracy in target group. % of students enrolled who complete the course.
Efficiency:	Cost per student.
Quality:	Students rating course content a 5 (Scale 1 to 5).

EXAMPLE FOR AN INSPECTION AND REGULATION AGENCY.

Goal: To increase licensees' compliance with all rules and regulations.

Objectives: Decrease the percentage of licensees not in compliance with all rules and regulations.

Performance Measures:

Inputs:	Number of permit applications received. Number of complaints filed against licensees.
Outputs:	Number of permits issued. Number of investigations.
Outcomes:	Number of licensees in compliance with all rules and regulations. Number of licensees with more than one violation.
Efficiencies:	Average time to process permit applications. Cost per permit issued.
Quality:	% reduction in processing errors.

BENCHMARKING

Use Benchmarking to Establish Performance Targets

Benchmarking involves seeking out best-in-class performers inside or outside of the organization, studying them to determine why they are the best at what they do, and applying what is learned.

Potential benchmarking partners can be identified through:

- Previous studies,
- Literature from national associations,
- Awards given to organizations,
- Business/government press literature, and
- The Internet.

Benchmarking data may represent: professional, national, or accreditation standards as well as quality practices; the highest or lowest rating (whichever is more desirable) in a given issue or field; or performance or workload levels set in statutes, regulations, or official guidelines.

In a world class organization, benchmarking is not viewed as a one-shot study, but rather as an ongoing process. The benchmarking process consists of four stages:

1. Planning Stage

- Establish the scope of the study.
- Form a team and obtain resources.
- Document and analyze the process you want to study. This decision will be based on the process and partner organizations you have selected for your study.
- Develop preliminary methods for gathering information.
- The process does not necessarily have to be sequential, but this is a good checklist to be sure you are not overlooking important factors.

2. Data Collection Stage

- Use the first round of information you collected to identify benchmarking partners.
- Plan a new data collection instrument and strategy.
- Complete a second round of data collection.

3. Analysis Stage

- Gauge the similarities of the data between the benchmarking partners and your organization--before you decide to adopt or adapt any measures or a new process.

Note: Generally, an agency will concentrate on a process study for the comparison of performance measures. A process is a work activity that has a discrete number of inputs, steps, outputs, and has its own feedback and results information. To begin your study, develop a list of processes and decide on the factors you wish to include. Next, create a flow chart for the "as is" process. This information will be important as you begin comparing your operations with other organizations to find opportunities for improvement.

- After comparing baseline status and the data discovered in the benchmarking process for a particular program or service, managers and staff know how far the organization must go to equal the best performers. The difference or "gap" between the expected performance and actual performance represents room for improvement. Benchmarking offers an organization a chance to aim for the top and to provide ideas on what it needs to do to get there.

4. Setting Performance Targets

Performance targets are quantifiable estimates of results expected for a given period of time. Setting performance targets is an art. The following criteria may help.

Performance targets:

- Should be developed by those who will be held accountable.
- Should include input from customers and stakeholders.
- Should include final and annual incremental targets.
- Should be derived from benchmarking, where available.
- Should represent realistic expectations toward meeting goals and objectives.
- Should be adjusted based on experience and expectations.
- Will enhance productivity.



Key Point

The real art of setting performance targets is to create challenging but achievable targets. The best targets are those that stretch the capacities of people and programs, but are, nonetheless, possible; those that result in genuine improvement, while building employee pride and confidence. Conversely, impossible performance targets kill motivation and stifle innovation.

Pitfalls in Benchmarking Projects

When properly used, benchmarking has numerous rewards. However, there are pitfalls in benchmarking as well.

- **Scope.**
When a project scope is too broad, there is no focus. This makes it hard to determine what companies would be comparable and what data to collect.
- **Time.**
The greater the amount of time spent in the planning stages, the better the benchmarking project. Allow enough time for data collection.
- **Funding.**
Funding for a project includes time, administrative support, research and expenses for data collection.
- **Measures.**
Public sector organizations often do not have commonality in reporting measures. Different organizational structures, accounting policies and regulations can all affect the performance information that is reported.
- **Commitment.**
To enhance commitment, it is important to have team members see the Benchmarking project as part of their normal job duties. A specific amount of time should be allocated for participation in the project.
- **Communication.**
Everyone involved must know the time expectations from project start to implementation.
- **Confidentiality.**
Some partner organizations will allow their names to be used and others will want to remain confidential--always accommodate their wishes and keep in mind the sacrifice that they are making in assisting you with your project.
- **Context.**
Be aware of the political and legal environment in which the partner organizations operate. The political realities of each jurisdiction shape many of the processes of government. Consider the differences in operations between a pro growth and a no growth philosophy.
- **Blame.**
Do not use comparisons to benchmarks to find fault with staff. For meaningful changes to occur, it is important to have commitment, not compliance, from people.
- **Pre-conceived notions.**
Finally, remember that if you think you are a hammer, everything looks like a nail. If you go into a project deciding what should be done, innovative ideas will be difficult, if not impossible, to find. **Think outside the box.**

SUMMARY

Review and Update Performance Measures

Developing good performance measures is an evolving process that improves with time. The following questions can be used to review and update performance measures, as well as goals, objectives and any other component of the model.

- What adjustments, if any, should be made to the measures currently used?
- What developments in the past year will influence current performance measures?
- Have there been any problems in measuring performance in the past year?
- What changes should be made in the way data are collected and analyzed?
- Is the measurement information useful to program management and staff, executive management, the organization's financial unit, customers and stakeholders?
- How could performance reports be enhanced?
- Are additional measures necessary?



Key Point

It takes time to develop good performance measures. This is an evolutionary process that will improve with experience. Agencies will need time to experiment with different measures, to accumulate actual performance data and to set realistic targets for future performance.

SUMMARY

The process of developing, updating and reporting performance measures is dynamic and requires ongoing attention. Accept that the process is evolutionary, and that measures will likely improve with experience.